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Remarks

Claims 1, 3-13, and 15-20 remain in the application.

Claim 8 has been amended to correct editorial errors that crept into the claim in the amendment filed 12 August 2003. These changes are not believed to affect the scope of the claim and also put the claim in better condition for appeal.

The Examiner has objected to the drawings under 37 CFR 1.83(a) as failing to show every feature of the invention as claimed, specifically the payload of claim 14. In the interest of simplifying issues, claim 14 has been canceled so that this objection is now moot.

The Examiner has rejected claims 4 and 9 under 35 U.S.C. 112, first paragraph for lack of support in the written specification for the method of wavelength conversion without conversion of the payload to electrical form. This rejection is traversed. The examiner's attention is drawn to Paragraph 0018 of the printed application US 2002/0131114 which describes the operation of the tunable laser 50 and semiconductor optical amplifier 51 in FIG. 2. The payload from the optical circulator 45, without being converted to electrical form, is input to the semiconductor optical amplifier to be impressed with a new carrier frequency.

The Examiner has rejected claim 2, under 35 U.S.C. 112, second paragraph for indefiniteness and lack of antecedent basis. This claim has been canceled.

The Examiner has rejected claims 1-11 and 13-20 under 35 U.S.C. 103(a) as being obvious over Chang (U.S. Patent 6,525,850) in view of Mizrahi (U.S. Patent 6,067,181). The Examiner has rejected dependent claim 12 under 35 U.S.C. 103(a) as being obvious over Chang in view of Mizrahi and Gehler (U.S. Patent 6,400,872). These rejections are traversed.

The Examiner attempts to justify Mizrahi's optical transfer element 30 (including optical circulator 31 and Bragg grating 40) at the output of Chang's dispersion compensator 1205 of FIG. 12.. The Examiner states on page 5 of the final rejection that

"One skilled in the art would have been motivated to use the circulator/Bragg grating device of Mizrahi in the system of Chang

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in order to more efficiently separate the data payload from the subcarrier signal of the header. One skilled in the art would also have recognized that use of the device of Mizrahi in the system of Chang, for instance at the output of the dispersion compensator (reference numeral 12205 in Figure 12), would have eliminated the need for the elements in Chang which serve to filter out the data payload from the subcarrier frequency (e.g. filter 930 in Figure 9) and vice-versa (e.g. filter 830 in Figure 8), thereby reducing the overall cost of the invention of Chang."

This argument lacks any reference to the prior art for a suggestion of the combination or for its desirability. Instead, the Examiner relies upon unpermitted hindsight to reconstruct the claimed invention. The Examiner has made major modification of Chang's header detector of FIG. 12 by incorporating Mizrahi's optical transfer element taught for use in locking a laser. The test for obviousness is not that the invention is efficient and economic but rather what is taught in the prior art. The Examiner's argument is tantamount to equating utility with obviousness, clearly contrary to well established patent law.

Furthermore, Chang teaches against the asserted obviousness. In FIG. 15, Chang shows an optical circulator 1510 and a Fabry-Perot filter 1515, just as does Mizrahi, but he fails to recognize that those same elements can be used in his circuitry of FIG. 12 to provide the efficiency and economy which are now so obvious to the Examiner. Surely, Chang must be considered one of at least ordinary skill in the art, who nonetheless failed to recognize the efficiency and economy of the claimed invention. The Examiner is substituting his judgment for that of Chang. Accordingly, the rejections should be removed.

Entry of these amendments are requested under 37 CFR 1.116 as canceling claims and putting them in better condition for appeal.

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In view of the above amendments and remarks, reconsideration and allowance of all claims are respectfully requested. If the Examiner believes that a telephone interview would be helpful, he is invited to contact the contact attorney at the listed telephone number, which is on California time.

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Respectfully submitted,

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